

Kaizen Events Workshop

Agenda

- Intros
- What is Kaizen?
- Kaizen Events
- Event Phases
- Ground Rules
- Videos
- Exercise
- Resources
- Q&A

Introductions

- 30 seconds each
- Where do you work?
- Why do they pay you? What value do you provide?
- Where are you from?
- What is your background on Lean?

Could this happen in your organization?

“For 40 years, you paid me for my hands, but I would have given you my brain for free (if you asked)”



Current State

- Too much focus on major projects and initiatives
 - Take a long time
 - Don't involve many people
 - High capital investment and long rollout
 - Some never started, never completed or not resourced properly
 - Top down driven, might not know the process or real problems

Future State

- Lots of opportunities in small, daily improvements led by workers
 - Leads to employee engagement (bottoms up)
 - About 70% of employees are not engaged¹
 - Shows respect to employee
 - All people are problem solvers, just need the authority, structure and opportunity

¹ <http://news.gallup.com/poll/181289/majority-employees-not-engaged-despite-gains-2014.aspx>



Kaizen

- Kai = Change, Zen = Good (Change for the good)
- Ask people for improvement ideas
 - What bugs them? Where do you struggle?
- Listen, listen, listen
- Do not give answers or solutions
- Help them test out and implement solutions
- Teach and coach them along the way (new way of thinking)
- Reward and recognize small wins
- Share ideas with others

Kaizen Video



<https://www.youtube.com/watch?v=fcBXtwGexNc> (4 mins)

Kaizen Burst/Blitz Event

- Major improvement with large team
 - Many stakeholders, non-judgmental and non-blaming
- 3-5 full day events
- 80% of improvements done during week
- Remaining 20% completed in 30 days
- Dedicated time for workers, support team and management
- Requires lots of prep work and planning
- Best approach to achieve dramatic changes
- Leads to fast improvement results that normally take months or years otherwise

Kaizen Events

- 3 major benefits of events
 - **INTENSITY** - Compressed time frame ensures continuity and efficiency
 - **IMMEDIACY** - Implementation is more immediate with daily leader updates
 - **IMPORTANCE** - Best candidate is a costly, complex, delay-ridden process

Case Study: Oregon Environmental Quality

Kaizen events in the following areas:

- **Compliance and enforcement:** DEQ reduced processing time from the issue of pre-enforcement notice to formal enforcement action by 50 percent, a savings of about 22 work days, and steps in its formal enforcement action review and approval process by 50 percent.
- **DEQ laboratory:** DEQ reduced the time for posting of lab sample analysis reports by 50 percent, using bar coding and other innovative measures.

<http://www.deq.state.or.us/msd/budget/1113ARB/08-AM.pdf>



Kaizen Process

- Kaizen Implementation Consists of Three Phases:
 - Phase 1: Planning and Preparation
 - Phase 2: Implementation – The Event
 - Phase 3: Follow Up and Sustainment

Phase 1: Planning and Preparation

- Planning and preparing for kaizen events includes:
 - Collecting background data
 - Selecting a target area and problem
 - Scheduling the event
 - Selecting team members
 - Making other necessary preparations to ensure a successful event
 - Approved Event Contract

Event Contract

Kaizen Event Project Charter



Project Name			
Agency/Division/Location			
Scope Meeting Date		Target Event Date	

Project Resources	Name	Contact Information	
Team Leader(s)		Phone:	email:
		Mobile:	
Sponsor(s)		Phone:	email:
		Mobile:	
Executive Leadership		Phone:	email:
		Mobile:	
Project Facilitator		Phone:	email:

Project Details

Problem Statement
 •What problem is the team addressing?
 •What is the magnitude and trend of the problem?
 •What is the baseline performance?

Project Scope

Where does the process begin and end for this event?

Out of Scope

What is off-limits or out-of-bounds for the team?

Business Objective

•Why do this project- strategic importance?
 •Does this project relate to a business or customer requirement? State which one.
 •How does this align with the Director's Flexible Performance Plan or strategic importance?
 •What is the business impact of improving this process?

Support Required

•What action is needed by the Sponsor to ensure success?
 •What support is needed from outside the project?

Risks/Constraints

- What are the foreseeable challenges to completing this project?
- What is the risk of not completing it?

Project Goals- Metrics

Goal	Metric	Baseline	Metric Goal
• Increase fist time quality/accuracy • Reduce lead/cycle time	*	*	*

Expected Business Results

Direct Benefits

- What is the potential financial impact and what are the expected financial impacts?
- What is the source of these numbers?
- What assumptions are the teams using?

Indirect Benefits

Schedule

Milestone	Expected Completion Date	Actual Completion Date
Schedule/conduct scoping or additional team meeting		
Schedule Kaizen event, complete e		
Gather any necessary pre-event da		
Identify Subject Matter Experts on "s		
Complete Kaizen Event		
Set 30, 60, 90 follow up meetings		

Charter Approval

Sponsor	Date
Name	Date

Participants

Name	Title	E-Mail / Phone

Phase 2: Implementation

- Process changes are made during a facilitated, 3-5 day event. Typical steps include:
 - Team orientation
 - Gathering baseline data (time studies, etc.)
 - Mapping the process
 - Brainstorming improvement ideas
 - Testing ideas
 - Analyzing the results
 - Documenting the new process, and
 - Presenting the results

Event Checklist

RPI Prep Worksheet

By:

Date:

Event:

PREPARATION

3rd Week Before Event:	2nd Week Before Event:	1st Week Before Event:
<input type="checkbox"/> Assure RPI Agreement/ Contract has been developed and signed. <input type="checkbox"/> Contact other sites/IPT leaders and solicit participation. <input type="checkbox"/> Confirm that 1/3 of the team is from the affected area <input type="checkbox"/> Write/Update Invitations, send invite and meeting notice. <input type="checkbox"/> Develop work around plan to cover 3-5 days production: A. Inventory build plan B. Identify back ups for participants C. Communicate potential impacts to the schedule <input type="checkbox"/> Coordinate and assure material availability for time observations and running new process during event. <input type="checkbox"/> Review event schedule, measurements, targets and action deliverables with Union Leadership. <input type="checkbox"/> Determine Room for the event and book <input type="checkbox"/> Pre meeting with all operators in the target area to inform them of the event, measurements, targets and action <input type="checkbox"/> Post visual information in the area about the event <input type="checkbox"/> Begin collection of historical data about area/process: -Calculate Productivity -Customer issues -Audit results -Staffing levels -On-Time % -Current layouts & square footage -MPS performance -SS ratings -Scrap and Rework -Area procedures / work instructions -Overtime -Safety rates & recent activities -Exploded BOMs -Quality data & trends	<input type="checkbox"/> Invite management to kaizen report-out. (Normally held on the last day of kaizen, allow 30 minutes per team.) <input type="checkbox"/> Pre meeting with team members. Communicate objectives and goals of kaizen, dress code, safety requirements, required hours during the kaizen (not an 8 hour day!), Etc. <input type="checkbox"/> Determine daily volumes and TAKT Time in advance. (This will be reviewed by the kaizen team.) <input type="checkbox"/> Review event schedule, measurements, targets and action deliverables with Union Leadership. <input type="checkbox"/> Pre meeting with all operators in the target area to inform them of the event, measurements, targets and action <input type="checkbox"/> Arrange for resources the team expects to need: A. Electricians, fabricators, and maintenance B. Contractors & Riggers (if needed) C. Materials and equipment that the team may need <input type="checkbox"/> Put up a blank flipchart to get suggestions from the work team. Ask questions, clarify and put these ideas on a list. <input type="checkbox"/> Review and confirm event Facilitator and team members (reconfirm 1/3 of team from area). <input type="checkbox"/> Complete the collection of historical data about area/process. <input type="checkbox"/> Review packages from any previous RPI Events in this area. Pay attention to time observations, standard work, stack charts, layouts, spaghetti charts, lessons learned. <input type="checkbox"/> Communicate need and arrange approval for potential overtime needed for the event.	<input type="checkbox"/> Review "3 Week" and "2 Week" checklists. Resolve open issues. <input type="checkbox"/> Present all pre-work to Facilitator for GO/NO GO decision. <input type="checkbox"/> Reconfirm schedule commitments with each team member, supervisor, maintenance people, and contractors. <input type="checkbox"/> Review actual Production Control Boards for the last 3-4 weeks. Identify the top 5 problem categories and then the top 5 issues. <input type="checkbox"/> Final review of event with Local Union Leadership. <input type="checkbox"/> Hold final meeting with work/area team. Review targets, action deliverables, and expectations during the event. Ask for feedback, try to address concerns. Reinforce WIIFM. <input type="checkbox"/> Arrange for food during the event as well as wrap-up celebration luncheon. This includes daily morning snack, lunches, and late-night meals if applicable. <input type="checkbox"/> Hotel accommodations for team members <input type="checkbox"/> Nightly Events if time allows <input type="checkbox"/> Transportation for visitors -to/from hotel <input type="checkbox"/> Check on Training Room & assure proper Setup: -Flip charts -Computer projector -DVD software on Computer -Training room dedicated and same as event room -Markers and masking tape
RPI Supplies		
Stopwatches (One per every 2 people)	Rulers (One per team)	Glue Sticks
Standard Work Forms	Masking Tape	Push Pins
Pens, markers.	Stapler	Pads of paper
Post-its	Scissors	Calculators (One per every 2 people)
		Training materials/handouts
		Flow exercise materials
		Numbers game sheet
		Certificates
		Digital camera
		Cardboard
		Clipboards (One per every 2 people)

5 Day Format

Kaizen Event Overview (Box 2.3)

Day 1: Training	Day 2: Discovery	Day 3: Do	Day 4: Do, Re-Do, Document	Day 5: Celebrate Results
Lean training; begin mapping and measuring current work process	Measure and analyze current work process	Create and map new process	Evaluate improvements, operate using new process, finalize	Present results and celebrate

[EPA: Environmental Professional's Guide to Lean & Six Sigma](#)

Gemba Walk

- Japanese word for “the real place”
- Go to where the actual work is being done, interact with the workers to improve decision making and problem solving
- Shows respect for the workers to understand what they do
- Referred to as “Gemba Walk” or “Go and See”



Courtesy aria-automobile-nord.com

We can't commit 3-5 days...

- Are you working on the right problem?
- Are you underestimating the stakeholder input and knowledge of the process?
- How do you handle it when people are on vacation?
- Can you break the event into multiple half-day sessions?
- Can you scope down the effort (and impact)?

Ground Rules

- Be on time!
- No cell phone interruptions or distractions
- Keep an open mind to change
- Maintain a positive attitude
- Never leave in silent disagreement
- Create a blameless environment
- Practice mutual respect everyday
- Treat others as you want to be treated
- One person – one voice – no position or rank
- There is no such thing as a dumb question
- Understand the process and just do it

Measuring Success

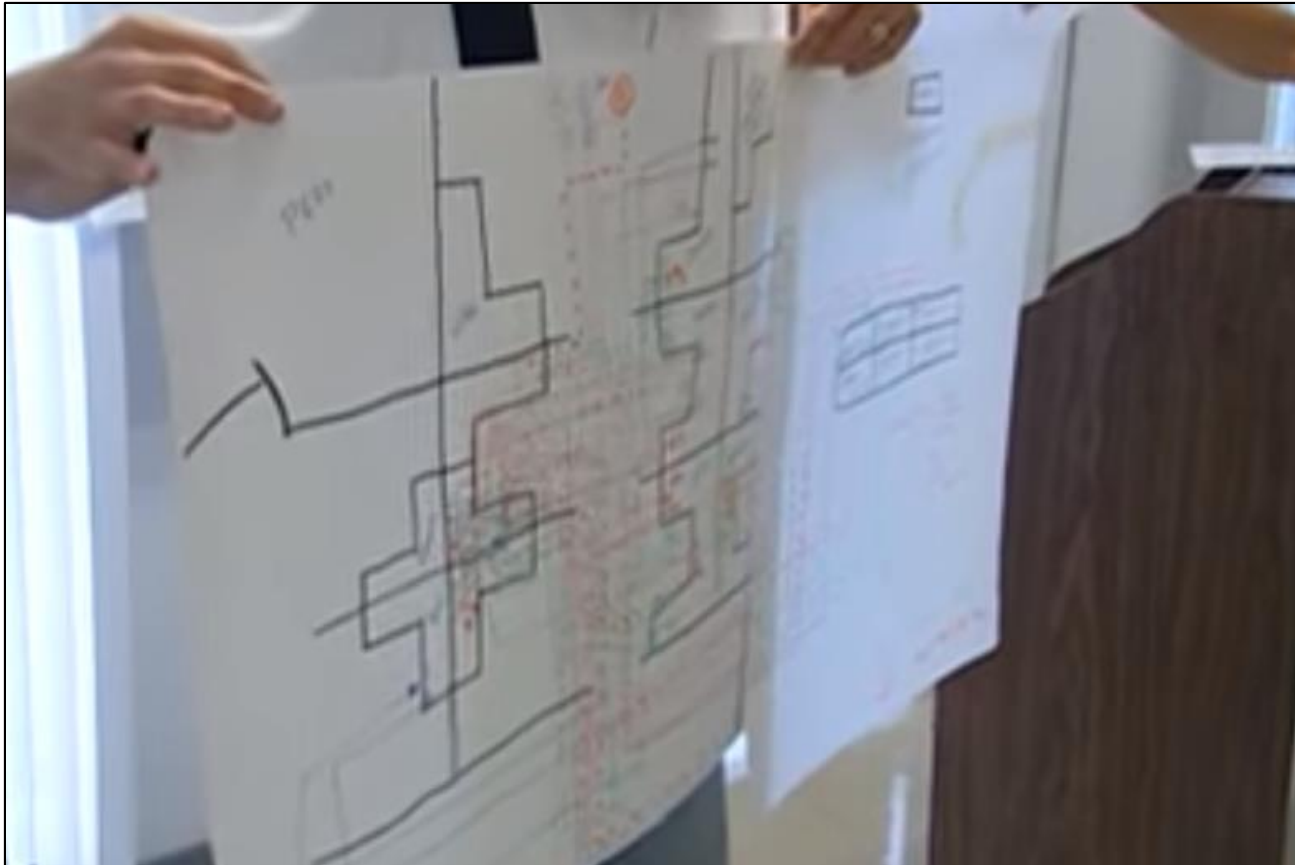
Time-based measures

- ↓ Lead time
- ↓ Cycle time
- ↓ Waiting time
- ↓ Time to complete form
- ↓ Motion, travel time
- ↓ Travel steps (ft/m)

Count-based measures

- ↓ Process steps
- ↓ Handoffs
- ↓ Decision points
- ↓ Loopbacks
- ↓ Delays
- ↓ Customer complaints
- ↓ Defects
- ↓ Number of forms
- ↓ Inventory quantity
- ↓ Backlog
- ↓ Floor Space

Video: Business Process Kaizen Event



<https://www.youtube.com/watch?v=zIncE0oxtzw> (5 mins)

Video: Energy “Treasure Hunt”



<https://www.youtube.com/watch?v=vAiAvwEvBxQ> (2 mins)

Kaizen Video



- OHIO EPA Division of Materials & Waste Management Kaizen Event (2 mins)
 - <https://www.youtube.com/watch?v=v6ql7dfundg>

Phase 3: Follow Up and Sustainment

- Wrap-up and follow-up activities ensure that the results of a kaizen event are communicated and sustained. Some suggestions include:
 - Highlight improvements made during the event on bulletin boards or in company newsletters
 - Have a celebration to cultivate a culture of worker involvement
 - Recognize and award team member contributions
 - Hold monthly “mini-meetings” to discuss the need for adjustments and to ensure unresolved actions are completed (30-60-90 days)

Keys to Success

- Getting the right people involved in the event
- Leadership must adopt all recommendations that meet the boundary and scope conditions (such as budget, procedures, etc)
- Requires extensive preparation effort
- Dedicated team members the entire time, not accessible to outsiders (vacation mode)
- Must be close to the “gemba”

Point Kaizen at FastCap



<https://www.youtube.com/watch?v=su9CulCZTBg> (23 mins)

Exercise: Event Charter

- Where would you like to conduct a kaizen event?

- What do you need help with?

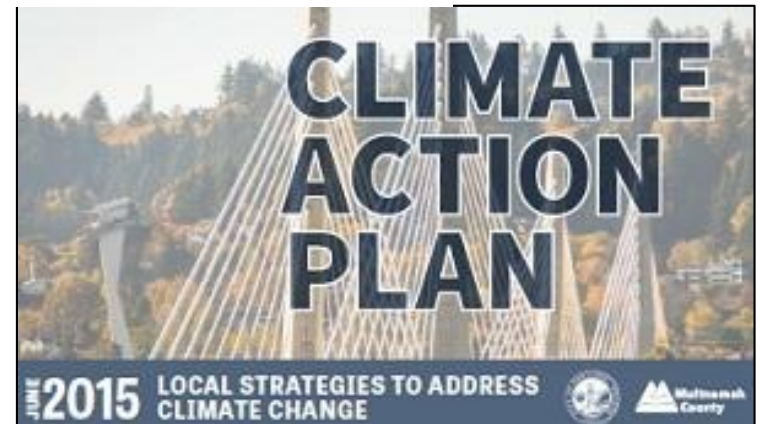
- Plus (+)
 - What did you like?
 - What did you learn?
- Delta (Δ)
 - What could have gone better?
 - What was least valuable?

What is BPI?

BUSINESS PERFORMANCE IMPROVEMENT



Helping businesses and organizations achieve “triple bottom line” performance using Lean and Six Sigma



Think Globally

Act Locally



- Mentor Current LSS Experts
- Analyze Data
- Research, Advise and Teach
- Facilitate Events
- Management Coaching
- Network

Training Classes and Workshops

- Intro to Lean and Six Sigma
- Lean and Green Workshop
- 5S Workplace Organization
- Personal Lean
- Statistical Process Control (SPC)
- Capability Analysis (Cpk/Ppk)
- Variable and Attribute Gage R&R
- Regression and ANOVA
- Design of Experiments
- Advanced SPC
- Value Stream Mapping (VSM)
- Advanced Standard Work
- Kaizen Events
- Lean Startup
- More coming soon...

<http://www.biz-pi.com/PDX/>



Other Websites

- Business Performance Improvement
 - BIZ-PI.com
- Earth Consultants - Lean Six Sigma and the Environment (Planet)
 - LeanSixSigmaEnvironment.org
- Lean Six Sigma for Good
 - LeanSixSigmaForGood.com
- Lean Portland
 - LeanPDX.org

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